

(19)



JAPANESE PATENT OFFICE

## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2002063731 A**

(43) Date of publication of application: **28.02.2002**

(51) Int. Cl. **G11B 7/135**  
**G11B 11/105**

(21) Application number: **2000249846**

(22) Date of filing: **21.08.2000**

(71) Applicant: **SONY CORP**

(72) Inventor: **BABA TOMOHIKO**  
**MITSUI SADAJI**

(54) **OPTICAL PICKUP AND DISK DEVICE**

COPYRIGHT: (C)2002,JPO

(57) Abstract:

PROBLEM TO BE SOLVED: To provide an optical pickup wherein the cost is reduced, the environmental resistance is high and the environmental load in manufacture is small by reducing the number of parts, and an inexpensive disk device having the optical pickup.

SOLUTION: In the optical pickup 10 which has a light source LD, an objective lens, a light receiving element PD and a beam splitter 2 and wherein exit light from the light source LD is converged and shone on a recording medium 11 by the objective lens 5 via the beam splitter 2, and return light from the recording medium 11 is separated from exit light by the beam splitter 2 and is received and detected by the light receiving element PD, an optical device 1, on one main surface 1A of which a diffraction grating is formed and on the other main surface 1B of which a toric surface is formed, is arranged between the light source LD and the beam splitter 2. Also, the disk device is composed of the optical pickup 10.

